Title of Instructional Materials: Spring Board

Grade Level: Grade 7

Summary of Spring Board

Overall Rating: ☒ Weak (1-2) ☐ Moderate (2-3) ☐ Strong (3-4) **Summary / Justification / Evidence:** This series of book is a quality series for the most mature, high ability student and an experienced GT teacher. This is not a textbook for the average or even high ability seventh grade student. It's uninteresting and activities would need to be modified for grade-level students. The textbook is not well-developed and assumes the students have a prior knowledge of vocabulary and skills. Most importantly, Spring Board does not meet the Common Core standards and did not include any supplemental materials. This is strongly not recommended for middle school students.	Important Mathematical Ideas: ☐ Weak (1-2) ☒ Moderate (2-3) ☐ Strong (3-4) **Summary / Justification / Evidence:**
Skills and Procedures: ☐ Weak (1-2) ☒ Moderate (2-3) ☐ Strong (3-4) **Summary / Justification / Evidence:**	Mathematical Relationships: ☐ Weak (1-2) ☒ Moderate (2-3) ☐ Strong (3-4) **Summary / Justification / Evidence:**

INDIANA'S EDUCATION ROUNDTABLE 2010

[redacted]

Spring Board -
Course 2

Instructional Materials Analysis and Selection

Phase 3: Assessing Content Alignment to the Common Core State Standards for Mathematics

Overall Rating: 1/2
Skills not well developed

Grade 7

a project of
The Charles A. Dana Center
at the University of Texas at Austin

Instructional Materials Analysis and Selection

Phase 3:

Assessing Content Alignment to the Common Core State Standards for Mathematics

A project of
The Indiana Education Roundtable, The Indiana Department of Education,
and
The Charles A. Dana Center at The University of Texas at Austin

2010–2011

Instructional Materials Analysis and Selection
Assessing Content Alignment to the Common Core State Standards for Mathematics

This tool provides educators with a structured way to make informed decisions when selecting mathematics instructional materials. In particular, it can help you become more knowledgeable about the *Common Core State Standards for Mathematics* so you can select instructional materials aligned with these standards.

This resource can also be used with the Dana Center's larger 4-phase *Instructional Materials Analysis and Selection* toolset: Phase 1: *Studying the Standards*, Phase 2: *Narrowing the Field of Instructional Materials*, Phase 3: *Assessing Subject-Area Content Alignment*, and Phase 4: *Assessing Vertical Alignment of Instructional Materials*. The particular resource you hold is a phase 3 tool that has been customized for assessing the alignment of instructional materials with the *Common Core State Standards for Mathematics*. Note that in 2009, the Dana Center developed a similar tool for Indiana educators to use in analyzing the alignment of instructional materials to Indiana's *Academic Standards for Mathematics*.

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About the development of this resource

This tool, *Instructional Materials Analysis and Selection: Assessing Content Alignment to the Common Core State Standards for Mathematics*, draws on the Dana Center's nearly 20 years of experience in strengthening education and has been used extensively in Texas and, increasingly, other states, to help local school districts and schools select instructional materials aligned with their standards. Development and production of the Instructional Materials Analysis toolset was supported by the Charles A. Dana Center.

This resource consists of a set of 15 individual grade-level / course documents that span kindergarten through the third year of high school mathematics. There is a document for each grade from kindergarten through 8, and six documents for high school mathematics (one each for the three courses in the traditional high school pathway Algebra I, Geometry, Algebra II; and one each for the three courses in the integrated high school pathway Mathematics I, Mathematics II, and Mathematics III).* At the request of various states and other entities, the Dana Center has populated this *Instructional Materials Analysis and Selection* tool with standards from the *Common Core State Standards for Mathematics* for use by local districts in selecting instructional materials aligned with these standards.

Note that the copyright of the *Common Core State Standards for Mathematics* is held by the National Governors Association Center for Best Practices and the Council of Chief State School Officers (collectively, NGA Center/CCSSO). This use of the CCSS for Mathematics is done under the CCSS Terms of Use, available at www.corestandards.org/terms-of-use. Specifically, this work is done under the Terms of Use "non-exclusive, royalty-free license to copy, publish, distribute, and display the Common Core State Standards for non-commercial purposes that support the Common Core State Standards Initiative." For a complete copy of the *Common Core State Standards for Mathematics* as well as the *CCSS for Mathematics, Appendix A: Designing high school mathematics courses based on the Common Core State Standards,* go to **www.corestandards.org/the-standards**.

October 2010 release.

We welcome your comments and suggestions for improvements—please send to **dana-txshop@utlists.utexas.edu** or the address in the copyright section above.

About the Charles A. Dana Center at The University of Texas at Austin

The Dana Center works to raise student achievement in K–16 mathematics and science, especially for historically underserved populations. We do so by providing direct service to school districts and institutions of higher education; to local, state, and national education leaders; and to agencies, nonprofits, and professional organizations concerned with strengthening American education.

The Center was founded in 1991 at The University of Texas at Austin. We carry out our work by supporting high standards and building system capacity; collaborating with key state and national organizations to address emerging issues; creating and delivering professional supports for educators and education leaders; and writing and publishing education resources, including student supports. Our staff of more than 60 has worked with dozens of school systems in nearly 20 states and with 90 percent of Texas's more than 1,000 school districts. We are committed to ensuring that the accident of where a child attends school does not limit the academic opportunities he or she can pursue.

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[*] For the high school course sequences, we relied on the *Common Core State Standards Mathematics Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards*, developed for the CCSS initiative by Achieve, Inc., which convened and managed the Achieve Pathways Group.

Acknowledgments

Unless otherwise noted, all staff listed here are affiliated with the Dana Center.

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Our thanks

We gratefully acknowledge the more than 100 school districts and thousands of educators who have informed the development of these resources.

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Introduction

Phase 1: Studying the Standards

Phase 2: Narrowing the Field of Instructional Materials

Phase 3: Assessing Mathematical Content Alignment

The purpose of Phase 3: Assessing Mathematical Content Alignment is to determine the degree to which the materials are aligned to the standards (content and processes). In Phase 3, participants conduct an in-depth review of the 2-3 instructional materials selected in Phase 2. The Phase 3 process requires selection committee members to use set criteria in order to determine a rating for each sample, to cite examples to justify their score for each sample, and to document standards that are missing or not well-developed in the instructional materials examined.

Implementation

As a whole group, selection committee members should practice applying the Phase 3 rubric. The purpose of the whole group practice is to promote inter-rater reliability and calibration.

In Phase 3 it is not important to analyze every page, section, or chapter of a resource. It is important to identify an area, topic, or big idea for the deep content analysis of Phase 3 (e.g. development of equivalent fractions, addition of whole numbers, development of proportionality...). The identified area, topic, or big idea will be used for all the instructional materials considered in Phase 3. The area, topic, or big idea can be identified through the use of student achievement data, curriculum priorities/challenges, or ideas that typically make up a greater portion of instruction in particular grade levels/courses. In most cases, Phase 3 will identify the one resource that is best aligned.

Step-by-Step Instructions

1. Use your current adoption to practice using the Phase 3 rubric. Select one big idea to focus your analysis (see note above for selecting the area, topic, or big idea).
2. Independently, committee members use their current resource, the identified big idea (and associated pages in that resource), and the Phase 3 rubric to score and document the extent to which the material (content and processes) aligns to the standards.
3. In small groups, committee members share their scoring and justifications. Small groups come to consensus on how the current resource would score on this big idea.
4. Each small group shares with the large group their score. Repeat the consensus building to generate a large group score on this big idea.
5. Clarify any misunderstandings about how to apply the rubric before committee members begin to use Phase 3 rubric on the selected materials.

6. Based on the size of the selection committee, determine the number of areas, topics, or big ideas to be examined for each grade/course. If the group size is large, more areas, topics, big ideas can be examined within each grade level/course.
7. Make sure committee members have multiple copies of the Phase 3 rubric.
8. Committee members apply the Phase 3 rubric for each of the materials.
9. Establish a time line for groups to complete and submit Phase 3 documentation.
10. Establish a data collection and analysis process to attain a rating for each resource.

Materials and Supplies

- Phase 3: Assessing Mathematical Content Alignment black line master — multiple copies per person
- Currently used instructional resource
- The 2 to 4 instructional materials selected in Phase 2

Phase 4: Assessing Vertical Alignment of Instructional Materials

Important Mathematical Ideas:
Understanding the scoring

	Superficially Developed			Well Developed
	1	2	3	4
Development	Important mathematical ideas are alluded to simply or are missing, approached primarily from a skill level, or provided for students outside any context.			Important mathematical ideas are evident, conceptually developed, and emerge within the context of real-world examples, interesting problems, application situations, or student investigations.
	1	2	3	4
Connections	Important mathematical ideas are developed independently of each other (i.e., they are discrete, independent ideas).			Important mathematical ideas are developed by expanding and connecting to other important mathematical ideas in such a way as to build understanding of mathematics as a unified whole.
	1	2	3	4
Rigor and Depth	Important mathematical ideas are applied in routine problems or in using formulated procedures, and are extended in separate / optional problems.			Important mathematical ideas are applied and extended in novel situations or embedded in the content, requiring the extension of important mathematical ideas and the use of multiple approaches.

Skills and Procedures:
Understanding the scoring

	Superficially Developed			Well Developed
Development	1	2	3	4
	Skills and procedures are the primary focus, are developed without conceptual understanding, and are loosely connected to important mathematical ideas — important mathematical ideas are adjunct.			Skills and procedures are integrated with important mathematical ideas and are presented as important tools in applying and understanding important mathematical ideas.
Connections	1	2	3	4
	Skills and procedures are treated as discrete skills rarely connected to important mathematical ideas or other skills and procedures.			Skills and procedures are integrated with—and consistently connected to—important mathematical ideas and other skills and procedures.
Rigor and Depth	1	2	3	4
	Skills and procedures are practiced without conceptual understanding outside any context, do not require the use of important mathematical ideas, and are primarily practiced in rote exercises and drill.			Skills and procedures are critical to the application and understanding of important mathematical ideas, and are embedded in problem situations.

Mathematical Relationships:
Understanding the scoring

	Superficially Developed			Well Developed
	1	2	3	4
Development	Mathematical relationships are not evident, and mathematics appears as a series of discrete skills and ideas.			Mathematical relationships are evident in such a way as to build understanding of mathematics as a unified whole.
Connections	Mathematical relationships are not required of students or are used primarily to provide a context for the practice of skills or procedures — words wrapped around drill.			Mathematical relationships are integrated with important mathematical ideas, and are integral in required activities, problems, and applications.
Rigor and Depth	Mathematical relationships require the use of skills and procedures, but rarely require the use of any important mathematical ideas or connections outside mathematics.			Mathematical relationships require the broad use of mathematics and integrate the need for important mathematical ideas, skills, and procedures, as well as connections outside mathematics.

Reviewed By: ____________________

Title of Instructional Materials: ____________________

Documenting Alignment to the Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 — 2 — [✓ 3] — 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

Documenting Alignment to the Standards for Mathematical Practice

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 [✓ 3] 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 [✓ 2] 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

Documenting Alignment to the Standards for Mathematical Practice

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 [✓ 3] 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

Documenting Alignment to the Standards for Mathematical Practice

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

[✓ 1] 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

Documenting Alignment to the Standards for Mathematical Practice

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y-2)/(x-1)=3$. Noticing the regularity in the way terms cancel when expanding $(x-1)(x+1)$, $(x-1)(x^2+x+1)$, and $(x-1)(x^3+x2+x+1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

[✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.1

Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction $^{1/2}/_{1/4}$ miles per hour, equivalently 2 miles per hour.*

Indicate the chapter(s), section(s), and/or page(s) reviewed.

5-2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing [✓ or not well developed] in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.RP.2a 2. Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. **Indicate the chapter(s), section(s), and/or page(s) reviewed.** 2-6, Unit 2 Practice, 3-8	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: 1 [✓ 2] 3 4 Mathematical Relationships: 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Some Gains **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.2b

2. Recognize and represent proportional relationships between quantities.
    b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1-6, Unit 2 Overview, 2-6, Unit 2 Practice, Unit 2 Math Stnds Rev, 3-6, 3-7, 3-8, EA 3-3, Unit 3 Practice, Unit 3 Math Stnds Rev, 5-2, EA 5-1, Unit 5 Practice, 2-4, Unit 5 Math Stnds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: 1 [✓ 2] 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

Found

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.RP.2c 2. Recognize and represent proportional relationships between quantities. c. Represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.*	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: 1 [✓ 2] 3 4 Mathematical Relationships: 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Fows
Indicate the chapter(s), section(s), and/or page(s) reviewed. 2-4, 2-6, Unit 2 Practice, 3-6, 3-7, 3-8, EA 3-3, Unit 3 Practice, 4-5, 5-2, EA 5-1, Unit 5 Practice, Unit 5 Stnds Rev	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.2d

2. Recognize and represent proportional relationships between quantities.
    - d. Explain what a point (*x*, *y*) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, *r*) where *r* is the unit rate.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

2-6, Unit 2 Practice, 3-8

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas 1 [✓ 2] 3 4

Skills and Procedures 1 [✓ 2] 3 4

Mathematical Relationships 1 [✓ 2] 3 4

Summary / Justification / Evidence

Found

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating 1 [✓ 2] 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.3

Use proportional relationships to solve multistep ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.*

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 1 - Getting Ready, 1-6, EA 1-2,
Unit 1 Practice, Unit 1 Strds Rev, 2-4
2-6, Unit 2 Practice, 3-6, 3-7, 3-8,
EA 3-3, Unit 3 Practice, 4-5, Unit
5-Getting Ready, 5-1, 5-2, EA 5-1,
EA 5-2, Unit 5 Practice, Unit 5 Strds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.NS.1a 1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. a. Describe situations in which opposite quantities combine to make 0. *For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.*	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: 1 [✓ 2] 3 4 Mathematical Relationships: 1 [✓ 2] 3 4 **Summary / Justification / Evidence** [illegible]
Indicate the chapter(s), section(s), and/or page(s) reviewed. 1-1, 1-2, Unit 1 Practice, Unit 1 Reflection	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.1b

1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
   b. Understand $p + q$ as the number located a distance $|q|$ from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1-1, 1-2, EA 1-1, 1-5, 1-6, Unit 1 Practice, Unit 1 Reflection

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: 1 [✓ 2] 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

Focus

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.NS.1c 1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	Important Mathematical Ideas 1 [✓ 2] 3 4 Skills and Procedures 1 [✓ 2] 3 4 Mathematical Relationships 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Found
Indicate the chapter(s), section(s), and/or page(s) reviewed. 1-2, EA 1-1, 1-5, EA 1-2, Unit 1 Practice, Unit 1 Reflection, Unit 1 Stnds Rev, 2-2, EA 2-1, 2-4, EA 2-2, 2-5 2-6, EA 2-3, Unit 2 Practice, Unit 2 Reflection, Unit 2 Stnds Rev.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.1d

1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
   - d. Apply properties of operations as strategies to add and subtract rational numbers.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1-2, EA 1-1, 1-5, EA 1-2, Unit 1 Practice, Unit 1 Reflection, Unit 1 Stnds Rev, 2-2, EA 2-1, 2-4, EA 2-2, 2-5, 2-6, EA 2-3, Unit 2 Practice, Unit 2 Reflection, Unit 2 Stnds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.2a

2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
   a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

EA 1-1, 1-5, 1-6, 1-7, EA 1-2, Unit 1 Practice, Unit 1 Reflection, Unit 1 Stnds Rev, 2-2, EA 2-1, 2-4, EA 2-2, 2-5, 2-6, EA 2-3, Unit 2 Practice, Unit 2 Reflection, Unit 2 Stnds Rev.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.2b

2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
   - b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1-3, 1-5, 1-7, EA 1-2, Unit 1 Practice, 2-3, 2-4, EA 2-2, 2-6, EA 2-3, Unit 2 Practice, Unit 2 Stnds Rev, 3-6, 3-7, 3-8, EA 3-3, Unit 3 Practice, Unit 3 Stnds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: 1 [✓ 2] 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

Rest found

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.NS.2c 2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. c. Apply properties of operations as strategies to multiply and divide rational numbers.	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: 1 [✓ 2] 3 4 Mathematical Relationships: 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Found
Indicate the chapter(s), section(s), and/or page(s) reviewed. EA 1-1, 1-5, 1-6, 1-7, EA 1-2, Unit 1 Practice, Unit 1 Reflection, Unit 1 Stnds Rev, 2-2, EA 2-1, 2-4, EA 2-2, 2-5, 2-6, EA 2-3, Unit 2 Practice, Unit 2 Reflection, Unit 2 Stnds Rev	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.2d

2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
    d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1-1, 1-5, 1-6, EA 1-2, Unit 1 Practice
Unit 1 Reflection

2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

[illegible]

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.3

Solve real-world and mathematical problems involving the four operations with rational numbers.[1]

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[1] Computations with rational numbers extend the rules for manipulating fractions to complex fractions.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 1 Overview, Unit 1 Getting Read, 1-2,
1-3, 1-4, EA 1-1, 1-5, 1-6, 1-7, EA 1-2, Unit
1 Prac., Unit 1 Ref, Unit 1 Strds Rev, Unit 2 Over,
Unit 2-GR, 2-1, 2-2, EA 2-1, 2-3, 2-4, EA 2-2,
2-5, 2-6, EA 2-3, Unit 2 Prac, Unit 2 Ref, Unit 2
Strds Rev, Unit 3 Over., Unit 3-GR, 3-6, 3-7,
3-8, 3-9, EA 3-3, Unit 3 Prac, Unit 3 Ref, Unit 3
Strds Rev, Unit 4 Over, Unit 4-GR, 4-1, 4-2,
4-3, EA 4-1, 4-4, 4-5, EA 4-2, Unit 4 Prac, Unit 4 Ref, Unit 4 Strds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: 1 [✓ 2] 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

Found

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Use properties of operations to generate equivalent expressions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: [✓ 1] 2 3 4 Mathematical Relationships: 1 [✓ 2] 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed. 2-2, EA 2-1, 2-3, 2-4, 2-5, Unit 2 Frac	**Summary / Justification / Evidence** Found
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating: 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Use properties of operations to generate equivalent expressions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
7.EE.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example, a + 0.05a = 1.05a means that "increase by 5%" is the same as "multiply by 1.05."*	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: 1 [✓ 2] 3 4 Mathematical Relationships: 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Found
Indicate the chapter(s), section(s), and/or page(s) reviewed. Unit 1 Over, Unit 1-GR, 1-1, 1-2, 1-3, 1-4, EA 1-1, 1-5, Unit 2 Over, 2-1, 2-5	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.*	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: [✓ 1] 2 3 4 Mathematical Relationships: 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Rest found
Indicate the chapter(s), section(s), and/or page(s) reviewed. Unit 1 Over., Unit 1-GR, 1-1, 1-2, 1-3, 1-4, EA 1-1, 1-5, 1-6, 1-7, EA 1-2, Unit 1 Prac., Unit 1 Ref., Unit 1 Stnds Rev., Unit 2 Over., Unit 2-GR, 2-1, 2-2, EA 2-1, 2-3, 2-4, EA 2-2, 2-5, 2-6, EA 2-3, Unit 2 Prac., Unit 2 Ref., Unit 2 Stnds Rev., Unit 3 Over., Unit 3-GR, 3-1, 3-2, 3-3, EA 3-1, 3-4,	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** Overall Rating: 1 [✓ 2] 3 4

3-5, EA 3-2, 3-6, 3-7, 3-8, 3-9, EA 3-3, Unit 3 Prac., Unit 3 Ref., Unit 3 StndsRev., Unit 4 Over., Unit 4-GR., 4-1, 4-2, 4-3, EA 4-1, 4-4, 4-5, EA 4-2, Unit 4 Prac., Unit 4 Ref., Unit 4 Stnds Rev., Unit 5 Over., Unit 5-GR., 5-1, 5-2, 5-3, EA 5-1, 5-4, 5-5, EA 5-2, Unit 5 Prac.

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

7.EE.4a

4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
   a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?*

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 2-GR., 2-1, 2-2, EA 2-1, 2-3, 2-4, EA 2-2, 2-6, EA 2-3, Unit 2 Prac., 3-7, 3-8, 3-9, EA 3-3, Unit 3 Prac, Unit 3 Stnds Rev., 4-1, 4-3, EA 4-1, 4-4, 4-5, EA 4-2, Unit 4 Prac., Unit 4 Ref., Unit 4 Stnds Rev.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.EE.4b 4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.*	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: 1 [✓ 2] 3 4 Mathematical Relationships: 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Found
Indicate the chapter(s), section(s), and/or page(s) reviewed. Unit 2 Over., Unit 2-GR, 2-5, EA 2-3, Unit 2 Prac., Unit 2 Stnds Rev.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.

7.G.1

Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

3-7, 3-8, EA 3-3, Unit 3 Prac, Unit 3 Ref, Unit 3 Strds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas 1 [✓ 2] 3 4

Skills and Procedures 1 [✓ 2] 3 4

Mathematical Relationships 1 [✓ 2] 3 4

Summary / Justification / Evidence

Found

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating 1 [✓ 2] 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.

7.G.2

Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1-4, 2-3, 3-1, 3-2, 3-3, 3-4, 3-5, EA 3-2, 3-6, 3-7, EA 3-3, Unit 3 Prac., 5-1

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.

7.G.3

Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

4-2, 4-3, EA 4-1, 4-5, EA 4-2, Unit 4 Prac

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are [✓ missing or] not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.G.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. **Indicate the chapter(s), section(s), and/or page(s) reviewed.** Unit 3-GR, 3-2, EA 3-1, Unit 3 Prac., Unit 4-GR, 4-3, 4-4, 4-5, Unit 4 Prac.	Important Mathematical Ideas [✓ 1] 2 3 4 Skills and Procedures [✓ 1] 2 3 4 Mathematical Relationships [✓ 1] 2 3 4 **Summary / Justification / Evidence** Rest found
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.G.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. **Indicate the chapter(s), section(s), and/or page(s) reviewed.** Unit 3-GR, 3-1, 3-2, 3-3, EA 3-1, Unit 3 Prac., Unit 3 Ref., Unit 4-GR	Important Mathematical Ideas [✓ 1] 2 3 4 Skills and Procedures [✓ 1] 2 3 4 Mathematical Relationships [✓ 1] 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

7.G.6

Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 1 Prac ; 3-2, EA 3-1, 3-5, 3-6, 3-7,
3-8, EA 3-3, Unit 3 Prac., Unit 4 Over.,
Unit 4-GR, 4-1, 4-2, 4-3, EA 4-1, 4-4
4-5, EA 4-2, Unit 4 Prac., Unit 4 Ref.,
Unit 4 Stnds Rev., 5-2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: 1 [✓ 2] 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

Focus

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Use random sampling to draw inferences about a population.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
7.SP.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	Important Mathematical Ideas [✓ 1] 2 3 4 Skills and Procedures [✓ 1] 2 3 4 Mathematical Relationships [✓ 1] 2 3 4 **Summary / Justification / Evidence**
Indicate the chapter(s), section(s), and/or page(s) reviewed. 3-6, 5-4, 5-5, EA 5-2, Unit 5 Prac., Unit 5 Ref.	**Portions of the domain, cluster, and standard that are missing [✓ or not well developed] in the instructional materials (if any):**
	Overall Rating [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Use random sampling to draw inferences about a population.

7.SP.2

Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*

Indicate the chapter(s), section(s), and/or page(s) reviewed.

5-3, Unit 5 Prac, Unit 5 Stnds Rev.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: [✓ 1] 2 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are [✓ missing] or not well developed in the instructional materials (if any):

Overall Rating: [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Draw informal comparative inferences about two populations.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. *For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.*	Important Mathematical Ideas: 1 [✓ 2] 3 4 Skills and Procedures: 1 [✓ 2] 3 4 Mathematical Relationships: 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Fous
Indicate the chapter(s), section(s), and/or page(s) reviewed. 2-1, 2-2, Unit 5-GR, 5-1, 5-3, Unit 5 Ref, Unit 5 Stds Rev.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Draw informal comparative inferences about two populations.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
7.SP.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* **Indicate the chapter(s), section(s), and/or page(s) reviewed.** 2-1, 2-2, Unit 5-GR, 5-1, 5-3, Unit 5 Ref., Unit 5 Strds. Rev.	Important Mathematical Ideas 1 [✓ 2] 3 4 Skills and Procedures [✓ 1] 2 3 4 Mathematical Relationships 1 [✓ 2] 3 4 **Summary / Justification / Evidence** Fair.
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.5

Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5-GR, 5-2, 5-4, Unit 5 Prac., Unit 5 Ref., Unit 5 Stnds. Rev.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or [✓ not well developed] in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.6

Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.*

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5-GR, 5-1, 5-2. EA 5-1, 5-4
5-5, EA 5-2, Unit 5 Stnds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

Found

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.7a

7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.
   a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.*

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5 Over., 5-4, 5-5, EA 5-2, Unit 5 Prac., Unit 5 Ref., Unit 5 Stnds. Rev.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

[illegible]

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.7b

7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.
   b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?*

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5 Over., 5-5, EA 5-2, Unit 5 Rac., Unit 5 Ref, Unit 5 Stnds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

[illegible]

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.8a

8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
    a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5 Over., 5-5, EA 5-2, Unit 5 Prac., Unit 5 Ref, Unit 5 Stras Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 [✓ 2] 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: 1 [✓ 2] 3 4

Summary / Justification / Evidence

Few.

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 [✓ 2] 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.8b

8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
   - b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5 Over., 5-5, EA 5-2, Unit 5 Prac., Unit 5 Ref., Unit 5 Stnds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.8c

8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
   c. Design and use a simulation to generate frequencies for compound events. *For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?*

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5 Over., 5-5, EA 5-2, Unit 5 Prac., Unit 5 Ref., Unit 5 Stnds Rev

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are [✓ missing] or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

INDIANA'S EDUCATION
ROUNDTABLE
2010

SpringBoard 7th Grade (M.S. 2) College Board

Instructional Materials Analysis and Selection

Phase 3: Assessing Content Alignment to the Common Core State Standards for Mathematics

Grade 7

a project of
The Charles A. Dana Center
at the University of Texas at Austin

Instructional Materials Analysis and Selection

Phase 3:
Assessing Content Alignment to the Common Core State Standards for Mathematics

[redacted]

A project of
The Indiana Education Roundtable, The Indiana Department of Education,
and
The Charles A. Dana Center at The University of Texas at Austin

2010–2011

Instructional Materials Analysis and Selection
Assessing Content Alignment to the Common Core State Standards for Mathematics

This tool provides educators with a structured way to make informed decisions when selecting mathematics instructional materials. In particular, it can help you become more knowledgeable about the *Common Core State Standards for Mathematics* so you can select instructional materials aligned with these standards.

This resource can also be used with the Dana Center's larger 4-phase *Instructional Materials Analysis and Selection* toolset: Phase 1: *Studying the Standards*, Phase 2: *Narrowing the Field of Instructional Materials*, Phase 3: *Assessing Subject-Area Content Alignment*, and Phase 4: *Assessing Vertical Alignment of Instructional Materials*. The particular resource you hold is a phase 3 tool that has been customized for assessing the alignment of instructional materials with the *Common Core State Standards for Mathematics*. Note that in 2009, the Dana Center developed a similar tool for Indiana educators to use in analyzing the alignment of instructional materials to Indiana's *Academic Standards for Mathematics*.

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About the development of this resource

This tool, *Instructional Materials Analysis and Selection: Assessing Content Alignment to the Common Core State Standards for Mathematics*, draws on the Dana Center's nearly 20 years of experience in strengthening education and has been used extensively in Texas and, increasingly, other states, to help local school districts and schools select instructional materials aligned with their standards. Development and production of the Instructional Materials Analysis toolset was supported by the Charles A. Dana Center.

This resource consists of a set of 15 individual grade-level / course documents that span kindergarten through the third year of high school mathematics. There is a document for each grade from kindergarten through 8, and six documents for high school mathematics (one each for the three courses in the traditional high school pathway Algebra I, Geometry, Algebra II, and one each for the three courses in the integrated high school pathway Mathematics I, Mathematics II, and Mathematics III).* At the request of various states and other entities, the Dana Center has populated this *Instructional Materials Analysis and Selection* tool with standards from the *Common Core State Standards for Mathematics* for use by local districts in selecting instructional materials aligned with these standards.

Note that the copyright of the *Common Core State Standards for Mathematics* is held by the National Governors Association Center for Best Practices and the Council of Chief State School Officers (collectively, NGA Center/CCSSO). This use of the CCSS for Mathematics is done under the CCSS Terms of Use, available at www.corestandards.org/terms-of-use. Specifically, this work is done under the Terms of Use "non-exclusive, royalty-free license to copy, publish, distribute, and display the Common Core State Standards for non-commercial purposes that support the Common Core State Standards Initiative." For a complete copy of the *Common Core State Standards for Mathematics* as well as the *CCSS for Mathematics, Appendix A: Designing high school mathematics courses based on the Common Core State Standards*, go to www.corestandards.org/the-standards.

October 2010 release.

We welcome your comments and suggestions for improvements—please send to dana-txshop@utlists.utexas.edu or the address in the copyright section above.

About the Charles A. Dana Center at The University of Texas at Austin

The Dana Center works to raise student achievement in K–16 mathematics and science, especially for historically underserved populations. We do so by providing direct service to school districts and institutions of higher education; to local, state, and national education leaders; and to agencies, nonprofits, and professional organizations concerned with strengthening American education.

The Center was founded in 1991 at The University of Texas at Austin. We carry out our work by supporting high standards and building system capacity; collaborating with key state and national organizations to address emerging issues; creating and delivering professional supports for educators and education leaders; and writing and publishing education resources, including student supports. Our staff of more than 60 has worked with dozens of school systems in nearly 20 states and with 90 percent of Texas's more than 1,000 school districts. We are committed to ensuring that the accident of where a child attends school does not limit the academic opportunities he or she can pursue.

For more information about our programs and resources, see our homepage at www.utdanacenter.org. To access our resources (many of them free), see our products index at www.utdanacenter.org/products. And to learn more about our professional development—and sign up online—go to www.utdanacenter.org/pd.

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* For the high school course sequences, we relied on the *Common Core State Standards Mathematics Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards*, developed for the CCSS initiative by Achieve, Inc., which convened and managed the Achieve Pathways Group.

Acknowledgments

Unless otherwise noted, all staff listed here are affiliated with the Dana Center.

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Sam Zigrossi, senior advisor

Our thanks

We gratefully acknowledge the more than 100 school districts and thousands of educators who have informed the development of these resources.

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Introduction

Phase 1: **Studying the Standards**

Phase 2: **Narrowing the Field of Instructional Materials**

Phase 3: **Assessing Mathematical Content Alignment**

The purpose of Phase 3: Assessing Mathematical Content Alignment is to determine the degree to which the materials are aligned to the standards (content and processes). In Phase 3, participants conduct an in-depth review of the 2-3 instructional materials selected in Phase 2. The Phase 3 process requires selection committee members to use set criteria in order to determine a rating for each sample, to cite examples to justify their score for each sample, and to document standards that are missing or not well-developed in the instructional materials examined.

Implementation

As a whole group, selection committee members should practice applying the Phase 3 rubric. The purpose of the whole group practice is to promote inter-rater reliability and calibration.

In Phase 3 it is not important to analyze every page, section, or chapter of a resource. It is important to identify an area, topic, or big idea for the deep content analysis of Phase 3 (e.g. development of equivalent fractions, addition of whole numbers, development of proportionality…). The identified area, topic, or big idea will be used for all the instructional materials considered in Phase 3. The area, topic, or big idea can be identified through the use of student achievement data, curriculum priorities-challenges, or ideas that typically make up a greater portion of instruction in particular grade levels courses. In most cases, Phase 3 will identify the one resource that is best aligned.

Step-by-Step Instructions

1. Use your current adoption to practice using the Phase 3 rubric. Select one big idea to focus your analysis (see note above for selecting the area, topic, or big idea).
2. Independently, committee members use their current resource, the identified big idea (and associated pages in that resource), and the Phase 3 rubric to score and document the extent to which the material (content and processes) aligns to the standards.
3. In small groups, committee members share their scoring and justifications. Small groups come to consensus on how the current resource would score on this big idea.
4. Each small group shares with the large group their score. Repeat the consensus building to generate a large group score on this big idea.
5. Clarify any misunderstandings about how to apply the rubric before committee members begin to use Phase 3 rubric on the selected materials.

---

6. Based on the size of the selection committee, determine the number of areas, topics, or big ideas to be examined for each grade course. If the group size is large, more areas, topics, big ideas can be examined within each grade level course.
7. Make sure committee members have multiple copies of the Phase 3 rubric.
8. Committee members apply the Phase 3 rubric for each of the materials.
9. Establish a time line for groups to complete and submit Phase 3 documentation.
10. Establish a data collection and analysis process to attain a rating for each resource.

Materials and Supplies

- Phase 3: Assessing Mathematical Content Alignment black line master — multiple copies per person
- Currently used instructional resource
- The 2 to 4 instructional materials selected in Phase 2

Phase 4: **Assessing Vertical Alignment of Instructional Materials**

Important Mathematical Ideas: Understanding the scoring

	1	2	3	4
Development	Important mathematical ideas are alluded to simply or are missing, approached primarily from a skill level, or provided for students outside any context			Important mathematical ideas are evident, conceptually developed, and emerge within the context of real-world examples, interesting problems, application situations, or student investigations
Connections	Important mathematical ideas are developed independently of each other (i.e., they are discrete, independent ideas).			Important mathematical ideas are developed by expanding and connecting to other important mathematical ideas in such a way as to build understanding of mathematics as a unified whole.
Rigor and Depth	Important mathematical ideas are applied in routine problems or in using formulated procedures, and are extended in separate / optional problems.			Important mathematical ideas are applied and extended in novel situations or embedded in the content, requiring the extension of important mathematical ideas and the use of multiple approaches.

Skills and Procedures: Understanding the scoring

	1	2	3	4
Development	Skills and procedures are the primary focus, are developed without conceptual understanding, and are loosely connected to important mathematical ideas — important mathematical ideas are adjunct.			Skills and procedures are integrated with important mathematical ideas and are presented as important tools in applying and understanding important mathematical ideas.
Connections	Skills and procedures are treated as discrete skills rarely connected to important mathematical ideas or other skills and procedures.			Skills and procedures are integrated with — and consistently connected to — important mathematical ideas and other skills and procedures.
Rigor and Depth	Skills and procedures are practiced without conceptual understanding outside any context, do not require the use of important mathematical ideas, and are primarily practiced in rote exercises and drill			Skills and procedures are critical to the application and understanding of important mathematical ideas, and are embedded in problem situations.

Mathematical Relationships: Understanding the scoring

	1	2	3	4
Development	Mathematical relationships are not evident, and mathematics appears as a series of discrete skills and ideas.			Mathematical relationships are evident in such a way as to build understanding of mathematics as a unified whole.
Connections	Mathematical relationships are not required of students or are used primarily to provide a context for the practice of skills or procedures — words wrapped around drill.			Mathematical relationships are integrated with important mathematical ideas, and are integral in required activities, problems, and applications.
Rigor and Depth	Mathematical relationships require the use of skills and procedures, but rarely require the use of any important mathematical ideas or connections outside mathematics.			Mathematical relationships require the broad use of mathematics and integrate the need for important mathematical ideas, skills, and procedures, as well as connections outside mathematics.

Reviewed By: ____________________

Title of Instructional Materials: ____________________

Documenting Alignment to the Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

Different approaches used to explain topic. Encourages students to draw on prior knowledge to develop, step-by-step, equations that & concepts relate to "real-life."

Indicate the chapter(s), section(s), or page(s) reviewed.

pg 93-108

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 [✓ 4]

Reviewed By: ____________________

Title of Instructional Materials: ____________________

Documenting Alignment to the Standards for Mathematical Practice

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Text entices students to work cooperatively to find meaning in everyday events and objects by developing priority process from the basics to analysis critical thinking skills. Text encourages students to "do math" and then reflect on the experiences.

Indicate the chapter(s), section(s), or page(s) reviewed.

pg 165 – 170
pg 199 – 206

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 [✓ 4]

Reviewed By: ____________________

Title of Instructional Materials: ____________________

Documenting Alignment to the Standards for Mathematical Practice

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Text urges students to explain their thought processes, ideas and reactions from concept development to application. However, no opportunities were given to student to critique another student's reasoning.

Indicate the chapter(s), section(s), or page(s) reviewed.

pg 241 – 249

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 [✓ 3] 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

Documenting Alignment to the Standards for Mathematical Practice

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Students make & manipulate their own charts, data & notes to develop generalized methods of solution. Practice problems & the development of the topic show how math can be predictive & practically useful.

Indicate the chapter(s), section(s), or page(s) reviewed.

pg 329 – 336

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 [✓ 4]

Reviewed By: ____________________

Title of Instructional Materials: ____________________

Documenting Alignment to the Standards for Mathematical Practice

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Text starts by providing some tables & graphs & then the text asks students to create more tables & graphs for further work; but the text doesn't explain why ~~tables~~ tables & graphs are to be set up the way they are. Students need to understand the why & how of table & graph development & presentation. However, the hands-on manipulatives show students past the "rules & procedures" & portrayal of math to straight-forward application & comprehension.

Indicate the chapter(s), section(s), or page(s) reviewed.

pg 41 – 52

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 [✓ 3] 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

The text encourages vocab development over the course of the year; however, only focusing on ~30 words. That # should be higher (40-45) as there is a lot of jargon to master. Students are often asked to explain or compare/contrast their methods to seek out generalizability to other circumstances. Text guides student thinking from intuition to formal presentation using prior knowledge & student interests as motivators.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Unit 3

Overall Rating

1 2 [✓ 3] 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7 × 8 equals the well remembered 7 × 5 + 7 × 3, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2 × 7 and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Good attention to detail

Text integrates data & written words well into graphical depictions and encourages students to do same

Indicate the chapter(s), section(s), or page(s) reviewed.

pg 87 – 92

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 [✓ 4]

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x - 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

After relational understanding has been developed, the text frequently asks (paraphrase) "Is there another (shorter) way?" (They model) that there is and ~~guide~~ nudge students to looking for "short cuts."

Indicate the chapter(s), section(s), or page(s) reviewed.

Unit 2

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 [✓ 4]

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7.RP.1 **Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.** ***For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour*** Good student interest potential. Several real-world connections. Well-written. **Indicate the chapter(s), section(s), and/or page(s) reviewed.** 3.6, 3.8	Important Mathematical Ideas: 1 2 3 [✓ 4] Skills and Procedures: 1 2 [✓ 3] 4 Mathematical Relationships: 1 2 3 [✓ 4] **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating: 1 2 3 [✓ 4]

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.2a

2. **Recognize and represent proportional relationships between quantities.**
   a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

3.6, 3.8

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 [✓ 3] 4

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 [✓ 3] 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 [✓ 3] 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.2b

2. **Recognize and represent proportional relationships between quantities.**
   b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.

Students develop their own ratios ⇒ they own a part of their ed.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

3.7

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 [✓ 4]

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.2c

2. **Recognize and represent proportional relationships between quantities.**
   c. Represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.*

More attn to explicit skill development is needed.

Good applications.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

3.6 – 3.8

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 [✓ 4]

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.2d

2. **Recognize and represent proportional relationships between quantities.**
   d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.

Some graphical representation is used, but, this is lacking for this particular standard.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

3.6 – 3.8

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 [✓ 3] 4

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 [✓ 3] 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Students need more opportunities to plot trends & on their own.

Overall Rating: 1 2 [✓ 3] 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.1d

1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
   - d. Apply properties of operations as strategies to add and subtract rational numbers.

Focus is mostly on $\mathbb{Z}$ and not so much on $\mathbb{Q}$. When $(Q, +)$ is addressed,

Indicate the chapter(s), section(s), and/or page(s) reviewed.

[illegible]

Unit 1

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 [✓ 3] 4

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 [✓ 3] 4

Summary / Justification / Evidence

one diagram (pg 48) is used & should be used more often.

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 [✓ 3] 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.2a

2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
   - a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.

Again, focus is on $\mathbb{Z}$ & not so much on $\mathbb{Q}$.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

unit 1

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 [✓ 3] 4

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 [✓ 3] 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 [✓ 3] 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.2b

2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
   - b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.

Same

Indicate the chapter(s), section(s), and/or page(s) reviewed.

unit 1

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 [✓ 3] 4

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 [✓ 3] 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 [✓ 3] 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.2c

2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
   - c. Apply properties of operations as strategies to multiply and divide rational numbers.

Same

Indicate the chapter(s), section(s), and/or page(s) reviewed.

unit 1

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 [✓ 3] 4

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 [✓ 3] 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 [✓ 3] 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – RATIOS AND PROPORTIONAL RELATIONSHIPS – 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

7.RP.3

Use proportional relationships to solve multistep ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.*

Good disc. of % Δ but a lacking in connection to proportions.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

[illegible].1.6

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 [✓ 3] 4

Skills and Procedures: 1 [✓ 2] 3 4

Mathematical Relationships: 1 2 [✓ 3] 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.1a

1. **Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.**
   a. **Describe situations in which opposite quantities combine to make 0.** *For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.*

I did not see this standard addressed in this section.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1.2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: [✓ 1] 2 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.1b

1. **Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.**
   b. **Understand $p + q$ as the number located a distance $|q|$ from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.**

Additive inverses concept was ~~briefly~~ addressed. Good visuals to help w/abs value & addition.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1.2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 [✓ 3] 4

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 [✓ 3] 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.1c

1. **Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.**
   c. **Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.**

Students are to develop this conclusion on their own; Visual & textual examples lead to good student understanding.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

1.2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 [✓ 4]

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.2d

2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
    d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.

No mention of this.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

unit 1

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: [✓ 1] 2 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – THE NUMBER SYSTEM – 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.3

Solve real-world and mathematical problems involving the four operations with rational numbers.[1]

Great development of real-world context & applications, especially how real-life problems are usually broken down into it's component parts anyway.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

~~Ch~~ unit 1

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 3 [✓ 4]

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 [✓ 4]

[1] Computations with rational numbers extend the rules for manipulating fractions to complex fractions.

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Use properties of operations to generate equivalent expressions.

7.EE.1

Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.

Good relational development of like terms, which leads to ~~com~~ more discussion of like terms.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

unit 2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 [✓ 3] 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 [✓ 3] 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Use properties of operations to generate equivalent expressions.

7.EE.2

Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."*

Good discussion about artist & producer income. Good action development along the way.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

2.2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 3 [✓ 4]

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 [✓ 4]

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

7.EE.3

Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. ***For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.***

Good examples

Indicate the chapter(s), section(s), and/or page(s) reviewed.

unit 2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 ~~3~~ [✓ 4]

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 ~~3~~ [✓ 4]

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

7.EE.4a

4. **Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.**
    a. **Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach.** ***For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?***

Multiple approaches used in this section, allow for students to choose method of preference.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Ex. unit 2
Alg. tiles, tables, graphs
trad. alg.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 3 [✓ 4]

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 [✓ 4]

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

7.EE.4b

4. **Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.**
    b. **Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.** ***For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.***

Different ways to explain this concept were presented plus it discussed why the inequality sign flips when dividing by a negative.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

unit 2

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 3 [✓ 4]

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 [✓ 4]

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.

7.G.1

Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

Text encourages students to develop their own definition of (to scale figures) classroom therefore attractive to students. Step by step guide is clear, but more skill practice is desired.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

3.7

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: 1 2 3 [✓ 4]

Skills and Procedures: 1 2 [✓ 3] 4

Mathematical Relationships: 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: 1 2 3 [✓ 4]

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

7.G.6

Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

Some practice problems are provided, but they lack real-world connections.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 3

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: [✓ 1] 2 3 4

Skills and Procedures: 1 [✓ 2] 3 4

Mathematical Relationships: [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Use random sampling to draw inferences about a population.

7.SP.1

Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

Randomness has a decent discussion; however, it is not discussed in ~~[illegible]~~ the manner this standard desires.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: [✓ 1] 2 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Use random sampling to draw inferences about a population.

7.SP.2

Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*

Not addressed

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: [✓ 1] 2 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: [✓ 1] 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Draw informal comparative inferences about two populations.

7.SP.3

Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. *For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.*

Not addressed

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas: [✓ 1] 2 3 4

Skills and Procedures: [✓ 1] 2 3 4

Mathematical Relationships: [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating: [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.

7.G.2

Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.

Good constructions section, b/c of detailed visuals & steps. students are not asked to construct Δs though explicitly.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

unit 3

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas 1 [✓ 2] 3 4

Skills and Procedures 1 [✓ 2] 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating 1 [✓ 2] 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.

7.G.3

Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

Text does not address this; however, I question this standard's importance.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 4

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

7.G.4

Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.

Text mention circumference & area of circle; however, it is lacking indepth.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 3

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – GEOMETRY – 7.G

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

7.G.5

Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.

Good visuals; guided developed through terms & concepts; more practice questions desired.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas 1 2 3 [✓ 4]

Skills and Procedures 1 2 [✓ 3] 4

Mathematical Relationships 1 2 3 [✓ 4]

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating 1 2 3 [✓ 4]

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.7b

7. **Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.**
    b. **Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.** ***For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?***

Not observed

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.8a

8. **Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.**
    a. **Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.**

Good tables & discussion, but, more visuals are needed. More practice needed.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas 1 [✓ 2] 3 4

Skills and Procedures 1 [✓ 2] 3 4

Mathematical Relationships 1 [✓ 2] 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating 1 [✓ 2] 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.8b

8. **Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.**
    b. **Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.**

More visuals needed; more practice problems

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas 1 [✓ 2] 3 4

Skills and Procedures 1 [✓ 2] 3 4

Mathematical Relationships 1 [✓ 2] 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating 1 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.8c

8. **Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.**
    c. **Design and use a simulation to generate frequencies for compound events.** ***For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?***

Not observed

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Draw informal comparative inferences about two populations.

7.SP.4

Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*

Not addressed

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.5

Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.

@ The charts they developed pose to be confusion to students, could have picked better or real-life connections.

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas 1 [✓ 2] 3 4

Skills and Procedures 1 [✓ 2] 3 4

Mathematical Relationships 1 [✓ 2] 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating 1 [✓ 2] 3 4

Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.6

Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.*

Not addressed

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 7 – STATISTICS AND PROBABILITY – 7.SP

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.7a

7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.
    - a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.*

Not addressed

Indicate the chapter(s), section(s), and/or page(s) reviewed.

Unit 5

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas [✓ 1] 2 3 4

Skills and Procedures [✓ 1] 2 3 4

Mathematical Relationships [✓ 1] 2 3 4

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating [✓ 1] 2 3 4

College Board SpringBoard, Middle School Math 2

SpringBoard

1-2

	Mathematical Practices	Chapter/Section/Page				Summary/ Justification/Evidence	Missing pieces of Math Practice	Overall Rating
	1. Make sense of problems and persevere in solving them.	See page 6 of 7 in introductory letter.						**4**
	2. Reason abstractly and quantitatively.	See page 6 of 7 in introductory letter.						**4**
	3. Construct viable arguments and critique the reasoning of others.	See page 6 of 7 in introductory letter.				**I chose not to spend time on this series as I felt it was not the level of book I was to analyze. I feel it is a quality series for the most mature, high ability student and an experienced, GT teacher.**		**4**
	4. Model with mathematics.	See page 6 of 7 in introductory letter.						**4**
	5. Use appropriate tools strategically.	See page 6 of 7 in introductory letter.						**4**
	6. Attend to precision.	See page 7 of 7 in introductory letter.						**4**
	7. Look for and make use of structure.	See page 7 of 7 in introductory letter.						**4**
	8. Look for and express regularity in repeated reasoning.	See page 7 of 7 in introductory letter.						**4**
7.RP	Ratios and Proportional Relationships	Chapter/Section/Page	Important Math Ideas	Skills and Procedures	Math Relationships	Summary/ Justification/Evidence	Missing portions of Standards	Overall Rating
	Analyze proportional relationships and use them to solve real-world and mathematical problems.							
7.RP1	Compute unit rates associated with ratios of fractions, including rations of lengths, areas and other quantities measured in like or different units. *For example, If a person walks 1/2 mile in each 1/4, complete the unit rate as the complex fraction* $^{1/2}/_{1/4}$ *miles per hour, equivalently 2 miles per hour.*	**Listed in Correlations Chart (1)**						**3**
7.RP.2	Recognize and represent proportional relationships between quantities.							**3**
7.RP.2a	Decide whether two quantities are in a proportional relationship, *e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the organ.*	**Listed in Correlations Chart (3)**						**3**
7.RP.2b	Identify the constant or proportionality (*unit rate*) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships..	**Listed in Correlations Chart (27)**						**4**
7.RP.2c	Represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.*	**Listed in Correlations Chart (13)**						**3**
7.RP.2d	Explain what a point (x, y) on a graph of a proportional relationship means in terms of the situation, with special attention to the points (0 ,0) and (1, *r*) where *r* is the unit rate.	**Listed in Correlations Chart (3)**						**3**

7.RP.3	Use proportional relationships to solve multistep and percent problems. *Examples: simple interest, tax, markdowns, quantities and commissions, fees, percent increases and decrease, percent error.*	**Listed in Correlations Chart (21)**						**4**
	THE NUMBER SYSTEM - 7.NS							
7.NS	**Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.**							
7.NS.1.a	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. A. Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.	**Listed in Correlations Chart**						
7.NS.1b	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. B. Understand $p + q$ as the number located a distance $\|q\|$ from p, in the positive or negative direction depending on wither q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rotational numbers by describing real-world contexts.	**Listed in Correlations Chart**						
7.NS.1c	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. C. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	**Listed in Correlations Chart**						
7.NS.1d	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. D. Apply properties of operations as strategies to add and subtract rational numbers.	**Listed in Correlations Chart**						
7.NS.2a	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. A. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to produces such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	**Listed in Correlations Chart**						

7.NS.2b	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. B. Understand that integers can be divided. Provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.	**Listed in Correlations Chart**						
7.NS.2c	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. C. Apply properties of operations as strategies to multiply and divide rational numbers.	**Listed in Correlations Chart**						
7.NS.2d	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. D. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	**Listed in Correlations Chart**						
7.NS.3	Solve real-world and mathematical problems involving the four operations with rational numbers. *(Computations with rational numbers extend the rules for manipulating fractions to complex fractions).*	**Listed in Correlations Chart**						
7.EE	**EXPRESSIONS AND EQUATIONS - 7.EE**							
	Use properties of operations to generate equivalent expressions.							
7.EE.1	Apply properties of operations as strategies to add and subtract , factor, and expand linear expressions with rational coefficients.	**Listed in Correlations Chart**						
7.EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."*	**Listed in Correlations Chart**						
	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.							
7.EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 ¾* inches long in the center of a door that is 27 ½ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.	**Listed in Correlations Chart**						

7.EE.4a	Use variables to represent quantities in a real-world or mathematical problem and construction simple equations and inequalities to solve problems by reasoning about the quantities. A. Solve word problems leading to equations of the form *px + q = r* and *p(x + q) = r*, where *p*, *q* , and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example. the perimeter of a rectangle is 54 cm. its length is 6 cm. What is its width?*	**Listed in Correlations Chart**						
7.EE.4b	Use variables to represent quantities in a real-world or mathematical problem and construction simple equations and inequalities to solve problems by reasoning about the quantities. B. Solve word problems leading to inequalities of the form px + q > r or px + q < r, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write in inequality for the number of sales you need to make, and describe the solutions.*	**Listed in Correlations Chart**						
	GEOMETRY - 7.G							
	Draw, construct, ad describe geometrical figures and describe the relationships between them.							
7.G.1	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	**Listed in Correlations Chart**						
7.G.2	Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	**Listed in Correlations Chart**						
7.G.3	Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	**Listed in Correlations Chart**						
	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.							
7.G.4	Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	**Listed in Correlations Chart**						
7.G.5	Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and simple equations for an unknown angle in a figure.	**Listed in Correlations Chart**						
7.G.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	**Listed in Correlations Chart**						

7.SP	STATISTICS AND PROBABILITY - 7.SP							
	Use random sampling to draw inferences about population.							
7.SP.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	**Listed in Correlations Chart**						
7.SP.2	Use date from random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*	**Listed in Correlations Chart**						
	Draw informal comparative inferences about two populations.	**Listed in Correlations Chart**						
7.SP.3	Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a multiple of a measure of variability. *For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.*	**Listed in Correlations Chart**						
7.SP.4	Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*	**Listed in Correlations Chart**						
	Investigate chance processes and develop, use and evaluate probability models.							
7.SP.5	Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate grater likelihood. A probability near 0 indicates an unlikely event. A probability around 1/2 indicates an event that in neither unlikely or likely and a probability near 1 indicates a likely event.	**Listed in Correlations Chart**						

7.SP.6	Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability, *For example. When a rolling a number cube 600 time, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.*	**Listed in Correlations Chart**						
7.SP.7a	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. A. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.*	**Listed in Correlations Chart**						
7.SP.7b	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. B. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land on heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?*	**Listed in Correlations Chart**						
7.SP.8a	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. A. Understand that, just as with sample events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.	**Listed in Correlations Chart**						
7.SP.8b	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. B. Represent sample spaces for compound events using mentors' such as organized lists, table, and tree diagrams', For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.	**Listed in Correlations Chart**						
7.SP.8c	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. C. Design and use a simulation to generate frequencies for compound events. *For example, use random digits as a simulation tool to approximate the answer to the questions: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?*	**Listed in Correlations Chart**						